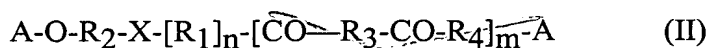
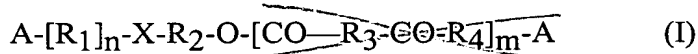
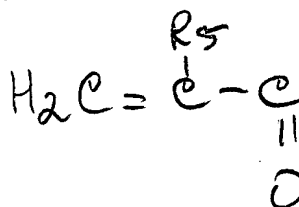
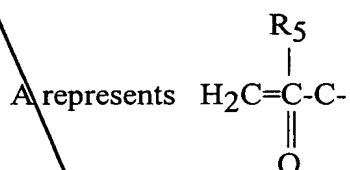


CLAIMS

1. Methacrylate or acrylate binder comprising oligomers of the following formula (I) and/or (II)



wherein

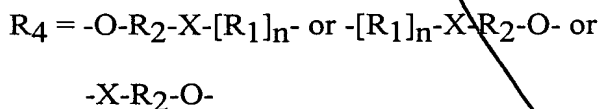


CO is carbonyl group

R₁ is a repetition unit of an aromatic polyester, in particular a repetition unit of PET and/or PEN,

R₂ is a divalent radical selected from the group consisting of optionally substituted linear and branched C₃-C₂₀ alkylen, cycloalkylen and aralkylen radicals, optionally substituted dialkylenether, trialkylenether or tetraalkylenether radicals and optionally substituted heterocyclic radicals, whereby said substituents are preferably selected from the group consisting of hydroxy group, ester group and alkyl group,

R₃ is a divalent radical selected from the group consisting of optionally OH or COOH substituted linear and branched aliphatic and aromatic and araliphatic radicals, in particular radicals with 3 to 14 C-atoms,



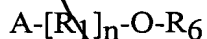
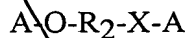
R₅ is hydrogen or methyl group

X is -O- or -NH-, and

n is 1 to 4, and

m is 0 to 3.

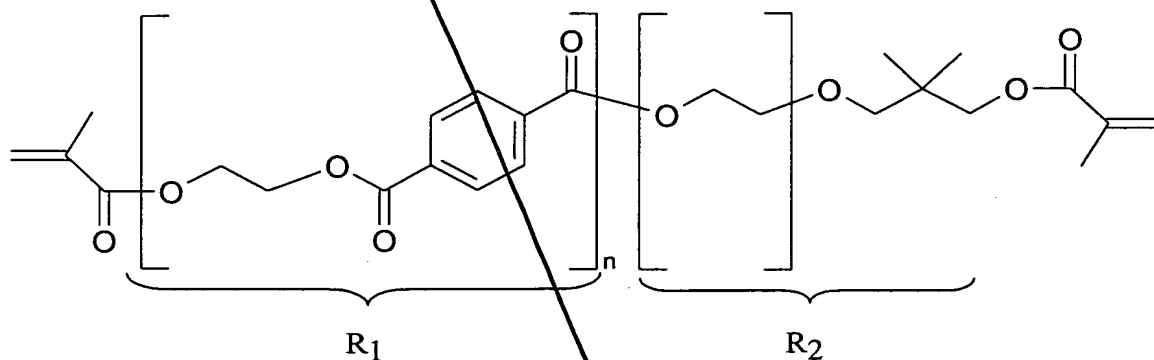
2. The binder of Claim 1 that further comprises at least one compound selected from the group consisting of



wherein A, R₁ and R₂ are as defined above

R₆ is a linear or branched aliphatic or aromatic or araliphatic radical, in particular a radical with 5 to 22 C-atoms.

3. The binder of Claim 1 or 2 that comprises the oligomer represented by



wherein

R₁ is a repetition unit of PET

R₂ is an ethoxylated neopentyl glycol derived radical

n is 1 to 4, and

k is 1 to 3.

4. The binder of anyone of the preceding claims that is obtainable by the steps of (i) generating hydroxy terminated binder precursor oligomers (OH-precursors) derived from at least one aromatic polyester, and (ii) reacting said OH-precursors of step (i) with methacrylic acid

and/or acrylic acid to form a respective ester, whereby step (i) comprises reacting an aromatic polyester, or a mixture of aromatic polyesters with at least one polyol and/or at least one aminopolyol to generate hydroxy terminated oligomers.

5. The binder of anyone of the preceding claims, which is a methacrylate binder.

6. The binder of anyone of the preceding claims, which is derived from PET.

7. The binder of anyone of claims 4 to 6, which is preparable using as polyol at least one diol, at least one triol or a mixture thereof, preferably a polyol selected from the group consisting of diethylene glycol, ethoxylated neopentyl glycol, di-(2-hydroxyethyl)-5,5-dimethylhydantoin, 1,3-dimethylol-5,5-dimethylhydantoin, tri-(2-hydroxyethyl)-isocyanurate, hydroxyalkyl isocyanurates, and mixtures thereof.

8. The binder of anyone of claims 4 to 7, which is preparable using a mixture of at least one polyol and/or at least one aminoalcohol and at least one monofunctional alcohol, preferably a monofunctional alcohol selected from the group consisting of C₅-C₂₂ linear saturated alcohols, C₅-C₂₂ linear unsaturated alcohols, C₅-C₂₂ branched saturated alcohols, C₅-C₂₂ branched unsaturated alcohols, and mixtures thereof, more preferably a monofunctional alcohol selected from the group consisting of 4-methyl-1-pentanol, hexanol, lynoleyl alcohol, benzyl alcohol, trimethylolpropane diallylether, allyl alcohol, nonanol, and mixtures thereof.

9. The binder of Claim 7 or 8, wherein the alcohol is selected from monohydroxy functional or dihydroxy functional polymers or oligomers selected from the group consisting of polyethers, polyesters, polyurethanes, polycaprolactones or mixtures thereof.

Sub A'
10. The binder of anyone of claims 4 to 9, wherein said OH-precursors of step (i) that are further reacted in step (ii) are identical with said hydroxy terminated oligomers.

11. The binder of anyone of claims 4 to 9, wherein said OH-precursors of step (i) that are further reacted in step (ii) are obtainable by further reacting said hydroxy terminated oligomers with at least one polycarboxylic acid and/or at least one polycarboxylic anhydride.

Contd
12. The binder of claim 11, wherein the polycarboxylic acid is a dicarboxylic acid or an anhydride of a dicarboxylic acid, preferably a dicarboxylic acid or anhydride selected from the group consisting of adipic acid, azelaic acid, phthalic acid or anhydride, isophthalic acid, dodecandicarboxylic acid, maleic acid or anhydride, trimellitic acid or anhydride and the like.

Sub A2
13. Method for the production of a binder of anyone of claims 4 to 12 comprising the steps of (i) generating OH-precursors from at least one aromatic polyester, and (ii) reacting said OH-precursors of step (i) with methacrylic acid and/or acrylic acid to form a respective ester, whereby step (i) comprises reacting an aromatic polyester, or a mixture of aromatic polyesters with at least one polyol and/or at least one aminopolyol to generate hydroxy terminated oligomers.

Contd
14. The method of claim 13, wherein step (i) furthermore comprises reacting said hydroxy terminated oligomers with at least one polycarboxylic acid and/or at least one polycarboxylic anhydride to get said OH-precursors.

15. A composition of binders comprising binders of one of claims 1 to 12 and at least one other (meth)acrylate and/or ethylenically unsaturated vinyl monomer.

16. A formulation comprising a binder of anyone of claims 1 to 12 or a composition of claim 15 and at least one further substance selected from the group consisting of initiators, catalysts, stabilizer, binders different from a (meth)acrylate binder or ethylenically unsaturated vinyl monomer, fillers and additives.

17. The formulation of Claim 16 that is an adhesive formulation, a coating formulation, a mortar formulation, a casting compound formulation or a flooring formulation.

18. Use of a binder of anyone of claims 1 to 14 or a composition of claim 15 or a formulation of claim 16 or 17 as or in an adhesive, coating, flooring, mortar, or casting compound.

19. Method for producing a joint, coating or flooring, characterized in that a binder of one of claims 1 to 14 or a composition of claim 15 or a formulation of claim 16 or 17 is applied on at least one substrate such that wetting and adhesion is achieved.